



#4

1

SEQUENCE LISTING

<110> REED, ROBIN
ZHOU, ZHAOLAN

<120> PURIFICATION OF FUNCTIONAL RIBONUCLEOPROTEIN COMPLEXES

<130> HMV-080.01

<140> 10/047,991
<141> 2002-01-14

<150> 60/261,521
<151> 2001-01-12

<160> 12

<170> PatentIn Ver. 2.1

<210> 1
<211> 393
<212> DNA
<213> Enterobacteria phage MS2

<220>
<221> CDS
<222> (1)..(390)

<400> 1
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Met Ala Ser Asn Phe Thr Gln Phe Val Leu Val Asp Asn Gly Gly Thr
1 5 10 15
ggc gac gtg act gtc gcc cca agc aac ttc gct aac ggg gtc gct gaa 96
Gly Asp Val Thr Val Ala Pro Ser Asn Phe Ala Asn Gly Val Ala Glu
20 25 30
tgg atc agc tct aac tcg cgt tca cag gct tac aaa gta acc tgt agc 144
Trp Ile Ser Ser Asn Ser Arg Ser Gln Ala Tyr Lys Val Thr Cys Ser
35 40 45
gtt cgt cag agc tct gcg cag aat cgc aaa tac acc atc aaa gtc gag 192
Val Arg Gln Ser Ser Ala Gln Asn Arg Lys Tyr Thr Ile Lys Val Glu
50 55 60
gtg cct aaa gtg gca acc cag act gtt ggt gta gag ctt cct gta 240
Val Pro Lys Val Ala Thr Gln Thr Val Gly Gly Val Glu Leu Pro Val
65 70 75 80
gcc gca tgg cgt tcg tac tta aat atg gaa cta acc att cca att ttc 288
Ala Ala Trp Arg Ser Tyr Leu Asn Met Glu Leu Thr Ile Pro Ile Phe
85 90 95
gct acg aat tcc gac tgc gag ctt att gtt aag gca atg caa ggt ctc 336
Ala Thr Asn Ser Asp Cys Glu Leu Ile Val Lys Ala Met Gln Gly Leu
100 105 110

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ctt aaa gat gga aac ccg att ccc tca gca atc gca gca aac tcc ggc 384
Leu Lys Asp Gly Asn Pro Ile Pro Ser Ala Ile Ala Ala Asn Ser Gly
          115           120           125

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atc tac taa
Ile Tyr
130

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<210> 2
<211> 130
<212> PRT
<213> Enterobacteriа phage MS2
```

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Met Ala Ser Asn Phe Thr Gln Phe Val Leu Val Asp Asn Gly Gly Thr
1 5 10 15

Gly Asp Val Thr Val Ala Pro Ser Asn Phe Ala Asn Gly Val Ala Glu
20 25 30

Trp Ile Ser Ser Asn Ser Arg Ser Gln Ala Tyr Lys Val Thr Cys Ser
 35 40 45

Val Arg Gln Ser Ser Ala Gln Asn Arg Lys Tyr Thr Ile Lys Val Glu
50 55 60

Val Pro Lys Val Ala Thr Gln Thr Val Gly Gly Val Glu Leu Pro Val
65 70 75 80

Ala Ala Trp Arg Ser Tyr Leu Asn Met Glu Leu Thr Ile Pro Ile Phe
85 90 95

Ala Thr Asn Ser Asp Cys Glu Leu Ile Val Lys Ala Met Gln Gly Leu
100 105 110

Leu Lys Asp Gly Asn Pro Ile Pro Ser Ala Ile Ala Ala Asn Ser Gly
115 120 125

Ile Tyr
130

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<210> 3  
<211> 1380  
<212> DNA  
<213> Escherichia coli
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<400> 3

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gcggcgttga	tcaccgcgt	acgcacggca	taccagaaag	cgacatctg	cgggatgttc	180
ggcatgattt	cacccctctg	ggcggttcc	atggtggcgg	caatacgtgg	atcttcgccc	240
aactcttcct	cgttaagactt	cagcgtctacg	gcacccagcg	gtttgtcttt	attaaccgct	300
tccagacctt	catcagtcag	cagatagttt	tgcaggaaact	ctttcgccag	ctctttgttc	360
ggactggcgg	cgttaataacc	tgcgttcagc	acgccaacga	acggtttgga	tggtgaccc	420
ttgaaggctcg	gcagtaccgt	tacaccataa	ttcactttgc	tggtgtcgat	gttggaccat	480
gcccacgggc	cgtttaggt	catcgctgtt	tgcctttat	taaaggcagc	ttctgcgtat	540

gagtaatcg tgcatt catgtgtttg ttttaatca ggtcaaccag gaaggtcaga 600
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 tacttgaacg cataaccccc gtcagcagca atcagcggcc aggtgaagta cggttcttgc 720
 aggttgaaca tcagcgcgt cttaccttc gcttcagtt ctatccag cgccgggatc 780
 tcttcccagg ttttggcg gttcgcgc agatcttgtataaattcag cgataacgct 840
 tcaacagcga tcgggtaagc aatca gtcgttgc acgttgc ccaggtaaac 900
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 gcgttagccac caaagcggtc gtgtccccag aagataatgt cagggccatc gccagttgcc 1020
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 ccttgggtt gaaatgtcg tgaaaacacc taaaacggact ctatccat tatacggcaa 1320
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<210> 4
 <211> 396
 <212> PRT
 <213> Escherichia coli

<400> 4
 Met Lys Ile Lys Thr Gly Ala Arg Ile Leu Ala Leu Ser Ala Leu Thr
 1 5 10 15

Thr Met Met Phe Ser Ala Ser Ala Leu Ala Lys Ile Glu Glu Gly Lys
 20 25 30

Leu Val Ile Trp Ile Asn Gly Asp Lys Gly Tyr Asn Gly Leu Ala Glu
 35 40 45

Val Gly Lys Lys Phe Glu Lys Asp Thr Gly Ile Lys Val Thr Val Glu
 50 55 60

His Pro Asp Lys Leu Glu Glu Lys Phe Pro Gln Val Ala Ala Thr Gly
 65 70 75 80

Asp Gly Pro Asp Ile Ile Phe Trp Ala His Asp Arg Phe Gly Gly Tyr
 85 90 95

Ala Gln Ser Gly Leu Leu Ala Glu Ile Thr Pro Asp Lys Ala Phe Gln
 100 105 110

Asp Lys Leu Tyr Pro Phe Thr Trp Asp Ala Val Arg Tyr Asn Gly Lys
 115 120 125

Leu Ile Ala Tyr Pro Ile Ala Val Glu Ala Leu Ser Leu Ile Tyr Asn
 130 135 140

Lys Asp Leu Leu Pro Asn Pro Pro Lys Thr Trp Glu Glu Ile Pro Ala
 145 150 155 160

Leu Asp Lys Glu Leu Lys Ala Lys Gly Lys Ser Ala Leu Met Phe Asn
 165 170 175

Leu Gln Glu Pro Tyr Phe Thr Trp Pro Leu Ile Ala Ala Asp Gly Gly
 180 185 190

Tyr Ala Phe Lys Tyr Glu Asn Gly Lys Tyr Asp Ile Lys Asp Val Gly
 195 200 205
 Val Asp Asn Ala Gly Ala Lys Ala Gly Leu Thr Phe Leu Val Asp Leu
 210 215 220
 Ile Lys Asn Lys His Met Asn Ala Asp Thr Asp Tyr Ser Ile Ala Glu
 225 230 235 240
 Ala Ala Phe Asn Lys Gly Glu Thr Ala Met Thr Ile Asn Gly Pro Trp
 245 250 255
 Ala Trp Ser Asn Ile Asp Thr Ser Lys Val Asn Tyr Gly Val Thr Val
 260 265 270
 Leu Pro Thr Phe Lys Gly Gln Pro Ser Lys Pro Phe Val Gly Val Leu
 275 280 285
 Ser Ala Gly Ile Asn Ala Ala Ser Pro Asn Lys Glu Leu Ala Lys Glu
 290 295 300
 Phe Leu Glu Asn Tyr Leu Leu Thr Asp Glu Gly Leu Glu Ala Val Asn
 305 310 315 320
 Lys Asp Lys Pro Leu Gly Ala Val Ala Leu Lys Ser Tyr Glu Glu Glu
 325 330 335
 Leu Ala Lys Asp Pro Arg Ile Ala Ala Thr Met Glu Asn Ala Gln Lys
 340 345 350
 Gly Glu Ile Met Pro Asn Ile Pro Gln Met Ser Ala Phe Trp Tyr Ala
 355 360 365
 Val Arg Thr Ala Val Ile Asn Ala Ala Ser Gly Arg Gln Thr Val Asp
 370 375 380
 Glu Ala Leu Lys Asp Ala Gln Thr Arg Ile Thr Lys
 385 390 395

<210> 5
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: Primer

<400> 5
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44

<210> 6
 <211> 44
 <212> DNA
 <213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Primer
<400> 6
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44

<210> 7
<211> 19
<212> DNA
<213> Artificial Sequence

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<220>
<223> Description of Artificial Sequence: Synthetic
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<400> 7
cgtacaccat cagggtacq
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19

<210> 8
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
fusion peptide

<400> 8
 Leu Val Pro Arg Gly Ser His Met Arg Gly Ser His His His His His His
 1 5 10 15
 His

<210> 9
<211> 7
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
thrombin cleavage site peptide

<400> 9
 Leu Val Pro Arg Gly Ser His
 1 5

<210> 10
<211> 10
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic peptide

<400> 10

Met Arg Gly Ser His His His His His His
1 5 10

<210> 11

<211> 455

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
nucleotide sequence

<400> 11

taatacgaact cactataggg agaccggcag atcagctgg ccgcgtccat ctggtcac 60
aggatctgat atcatcgatg aattcgagct cggtaccccg ttgcgtcctca ctctcttccg 120
catcgctgtc tgcgagggcc agctgttggg gtgagtaactc cctctcaaaa gcgggcattga 180
cttctgcctt ctagttatata accctacta aaggcagtag tcaagggttt ctttgaagct 240
ttcgctgtca ccctgtccct ttttttcca cagctgcagg tcgacgttga ggacaaactc 300
cccatggcgt acaccatcg ggtacgacta gtagatctcg tacaccatca gggtaacggaa 360
ttctcttagag tcgagttcta tagtgtcacc taaat 420
455

<210> 12

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: 6x His tag

<400> 12

His His His His His His
1 5